

Sustainable transport and the organisation of bus services in Manchester – Do markets, hierarchies or networks fail?

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² Both authors are affiliated to TransportMistra, which is an interdisciplinary research programme. As an outcome it will develop strategies, models and tools for making the transport sector head towards sustainability. For further information see www.mistra.org/mobility. Interviews in Manchester were carried out with Tomas Bergström, Lund University, with whom preliminary results from the case study in Greater Manchester have been discussed.

1. Introduction

“Sustainable transport” has become a headline for transport planning and policy making around the world. While there are many different definitions of what Sustainable Transport means, it commonly includes efforts to improve the environmental performance of transport systems, and to promote alternative modes of transport to private cars, such as public transport. Public transport can be important for reducing environmental pressures in several ways. In this paper we focus only on the potential of bus transport services in cities for attracting travellers from cars.

It is a basic assumption behind this paper that the ability of public bus transport to attract travellers from cars depends on how the bus sector is organised. By organisation we adopt an institutional point of view and consider basic modes of governance. Basic modes of governance include the forms “market”, “hierarchy” and “network” (Powell 1990). So-called New Public Management (NPM) reforms have changed the modes of governance of bus transport in several countries, including Denmark and the United Kingdom. Our focus is on how New Public Management Reforms have changed the mix of governance modes and thus may have influenced the ability of urban bus transport to attract travellers from cars.

We focus on a particular case: Public bus transport in England, exemplified by Greater Manchester. England represents a situation where - compared to continental Europe including Denmark - the NPM reforms have been particularly radical. In no other European country the market forces has achieved a role as dominant as in England (outside London). We therefore assume that it is relevant to investigate the influence from the NPM reforms in this case, in order to discuss how the change in governance modes more generally enable or constrain the delivery of more sustainable transport patterns.

New Public management reforms (Hood 1991) in the transport sector have included some of the following principal elements: Splitting up of previously integrated passenger transport executives with in-house production, corporatisation and privatisation of operators, commercialisation and tendering of services, and introduction of management by objectives and performance (Longva et al 2005, Marsden et al 2008). In general it involves a shift towards more “market” like governance modes at the expense of “hierarchy” in the provision of public services. In this paper we will understand New Public Management for urban transport as containing reforms of two directions: A horizontal and a vertical one. The horizontal dimension regards the framework for governance of public transport at the local level (e.g. between bus operators and regulators). The vertical dimension regards the framework of the central government to govern local transport planning (between central and local government). We believe that both dimensions are important for understanding the role of the organisational reforms.

In the case of England and Greater Manchester the *horizontal* reform dimension involves first and foremost the deregulation and privatisation reforms introduced by the Conservative Government from 1986 onwards. But it also includes partnership arrangements and other instruments facilitated by the Labour Government in the Transport Act 2000.

The *vertical* dimension regards introduction of new methods for the central government to govern transport performance at the local level, via management by objectives, and economic incentives, embodied in the so-called Local Transport Plan regime.

The first objective of the paper is to analyse which conditions the horizontal and vertical reform dimensions in England and Greater Manchester create for a modal shift from cars to bus transport.

The second objective of the paper is thus to consider if the specific configuration of market, hierarchy and network elements in Greater Manchester public bus transport can help explain the performance as regards modal shift in favour of public bus transport. In other words we use the case to explore and discuss how useful concepts of institutional governance modes are for analysing capacity for changes towards sustainable mobility in general.

The empirical background consists of general literature about UK transport reforms, policy documents from UK governments and the Greater Manchester authorities, as well as 13 qualitative research interviews. The interviews were carried out in autumn 2007, and involved eight representatives from management and staff of the Greater Manchester Passenger Transport Executive (GMPTe), one officer and one politician from Greater Manchester Passenger Transport Authority (GMPTA), as well as three representatives from operators and Greater Manchester Bus Operators Association (GMBOA). The interviews were taped, and central sections were transcribed. In late November 2007, two draft papers were presented and discussed at a workshop in Manchester with stakeholders. The feedback from the workshop was also taped and transcribed, and used to revise the draft papers.

2. Market, hierarchy and network

“Market”, “hierarchy” and “network” signify distinctive and to some extent opposite ideal type governance modes. We talk about governance modes because the ideal types each – and in combination – represent a way of organising, coordinating and governing an activity or sector in society. Each of them has specific characteristics, potential strengths and ‘failures’.

The *market* is a spontaneous coordination mechanism that assigns rationality and consistency to self-interested actions. Private property rights and competition are the basis of a well functioning market. Prices determine production and exchange, and no one rely on anyone else for direction; the exchange is ideally voluntary. Coordination is achieved through “the invisible hand”. Some strengths of well-functioning markets are fast, simple communication; easy allocation of resources and economic efficiency, while some potential market failures include monopoly, externalities, and free rider problems in public goods provision (Bohm 1987; Powell 1990).

Hierarchy is characterised by the visible hand of management in stead of the invisible hand of the market. The basis of hierarchy is clear and dependent relationships between superior and subordinate, such as in an employment relationship. Coordination is achieved through an authoritative system of order and commands. Hierarchy has strengths for instance in terms of accountability and power, while some potential hierarchy failures are information deficits and vague or inconsistent objectives (OECD 1992; Powell 1990). By hierarchy we do in this context mean decisions and regulation undertaken by local and national governmental authorities.

In *networks*, transactions occur neither through the price mechanism nor through dependent and authoritative relations. Network transactions are characterised by reciprocal, preferential and mutually

supportive actions. The basis of networks are complementary strengths, hence each network participant contributes with something the other participants need. Coordination is achieved through mutual trust. Some strengths of networks are effective exchange of information, flexibility and learning, while network failures for instance include limitation on the number of participants, “contested collaboration” (=too little trust among participants) and lack of accountability (Powell 1990; Schrank & Whitford 2007).

In practice governance mechanisms are mixed. One mechanism may emerge or be introduced to compensate for failures of others. Networks existing in a hierarchical environment sometimes work “in the shadow” of hierarchy which can increase the coordination capacity of networks “by virtue of the fact that they are embedded in the hierarchical structure” (Scharpf, 1994: 40).

These governance modes are to some extent reflected in the literature on public transport organisation. While market and hierarchy are widely acknowledged as opposite governance modes of local bus transport provision (the horizontal dimension), it is less common to address the network mode. As regards the vertical dimension (relations between central and local government) the literature mainly addresses hierarchy and network modes of governance (Greenwood et al 2002), because the notion of “market” is less obvious to describe interactions between public authorities. We will apply the network concept in analysing the horizontal dimension, but refrain from introducing the market for the vertical one.

3. The transport reforms

In this section we will briefly describe the transport reform trajectory in England outside London, and how it has materialised in the planning and organisation of public bus transport in Greater Manchester.

With the 1985 Transport Act, the Conservative government introduced a radical new deregulated framework for the English bus sector. Prior to these changes, buses in cities mostly implied public ownership. In the major cities, operations were undertaken by public Passenger Transport Executives (PTE’s), while the political responsibility was by the Passenger Transport Authority (PTA’s). With the 1985 Transport Act operations were split from the PTE’s and later sold to private operators, as were the bus companies owned by central government. It was made possible for everyone to operate bus services wherever they wanted, only with a requirement to obtain an Operator’s License, and to ensure compliance with basic safety and road traffic provisions. Local authorities were only allowed to subsidize “socially necessary” bus services, using competitive tendering. In Greater Manchester, commercial service today count for 82 % of bus mileage, while tendered service count for 18 %. One element of regulation was that The Office of Fair Trade was charged with overseeing “anti-competitive behaviour” by bus operators.

When it comes to the vertical dimension, the English system of transport governance was and remained quite centralised. The local authorities depend fully on the centre for capital investments etc, and previously they had to prepare annual bidding documents to attract funding for individual items (Greenwood et al 2002). Resources were tightly ring-fenced to particular areas of expenditure. The Conservative government more or less kept this existing system, but abolished the metropolitan county councils that were responsible for coordinating the transport policies and other functions in the major

cities. However some functions were kept at the metropolitan level. In Manchester for instance, the Greater Manchester PTA and PTE were retained, albeit with much more limited powers (as described above).

Hence, the Conservatives introduced the market as a prime governance mode in the horizontal dimension, while hierarchy remained as the most important governance mode in the vertical dimension.

When coming into power in 1997, the New Labour Government “unexpectedly perpetuated the Conservative’s policy of deregulation” (Knowles & White 2003: 141). Bus ownership and operation remained in the private sector. However, in the Transport Act 2000 the new government installed a range of tools which local authorities could use to improve the integration or coordination of public transport to compensate for observed shortcomings in the pure ‘market’ based model. Prior to the new legislation, local authorities such as Greater Manchester PTA had already entered into various voluntary partnership arrangements with operators to improve bus service quality in certain areas or corridors. (Wall & McDonald 2007: 166-167; Longva et al. 2005). The new legislation endorsed the notion of partnerships and offered more formal frameworks for them such as, the so-called “statutory bus partnerships”, and “quality contracts”, resembling the tendering system in London. However these new legal forms have in fact been little used. The new legislation also provided the local authorities with instruments to set up inter-operator ticketing schemes and improve bus information through partnership arrangements. Those instruments have been more widely applied, also in Manchester.

As regards the vertical dimension, more significant changes were introduced by New Labour. The Transport Act 2000 charged the English cities with a new system of planning and management by objectives and results (MBOR). The local authorities, under the supervision of the PTA’s must now draw up 5-year Local Transport Plans (LTP) (compared to previously annual schemes) that form the basis for implementing local transport policies as well as bids for national transport capital funding. The allocation of funds partly depends on the quality and ambition of the plans with regard to transport performance, and the results must be documented with performance indicators. The local authorities to a large extent define their own targets and indicators, but they must consider certain national priorities in setting them up, such as the improvement of public transport services. An LTP must cover all transport modes in an integrated way, and must also contain a so-called ‘bus strategy’. The Labour government did not reinstate regional bodies (outside London) with significantly stronger powers to implement the LTP’s, however.

Hence after the New Labour reforms, the market continues to dominate as a governance mode in the horizontal dimension of urban bus transport provision, and hierarchy is very important in the vertical dimension, but it seems that in both dimensions a network mode of governance has emerged or been more explicitly installed to supplement them. The network character of the ‘bus partnerships’ approach with its mutual voluntary commitments of public and private partners to contribute to increased quality was stressed by several of our interviewees. Hence, they talk about “informal understanding”, evolving of a “mature relationship”, and the authorities not having “power” but offering “opportunities”. Similarly, in the vertical dimension the MBOR scheme for local transport planning (including the bus mode) leaves the local authorities with more discretionary power than before, and the central government partly dependent on their performance with regard to national targets. This underlines the complementary and mutual strengths that central and local government

respectively dispose of, and thus incorporate a network mode of governance, even if the basic hierarchy is retained..

Periods Dimensions	Initial structure	Conservative reforms	Labour reforms
Horizontal dimension	Hierarchy	Market (and Hierarchy)	Market, (Hierarchy and Network)
Vertical dimension	Hierarchy	Hierarchy	Hierarchy (and Network)

Table 1 of dominant governance modes within each epoch and dimension.

In the following we analyze the two dimensions closer with regard to their effects on bus transport attractiveness vis-à-vis cars, and then we apply the governance mode concepts to interpret the results.

4. Horizontal organisation

Several conditions influence the possibilities for attracting travellers and establishing modal shift (Norheim 2006)³. We will only deal with some important aspects of the quality of public transport service: Fare levels; bus network integration; and quality of buses, bus lanes and shelters.

Since the implementation of Transport Act 1985 *fare levels* have increased. In all of England bus fares on average have increased by 36 % in real terms from 1984 and 20 years ahead. From 1994/5 to 2004/5 real fares in metropolitan counties increased by 20 %. In Greater Manchester the fare levels between 1984/5 and 2004/5 were fluctuating for some years, but since 2001/2 they are increasing. (Commission for integrated transport 2004: 16-17; NERA 2006: 4-5, 60-61). A reason for increased fares after deregulation is the fact that public bus transport prior to reforms was heavily subsidized, while after deregulation the level of subsidies has been reduced significantly. So although, production costs pr. vehicle km also has been reduced, increased productivity has not outweighed the reduction in subsidy (Mackie et al 1995: 240). Also lack of competition may have contributed to fare level increases. It has been estimated, that due to concentration of companies in particular areas, only 4 % of the commercial bus services are subject to direct competition (DfT 2006: 25).

Arguably coherence and *integration of the bus network* is important to provide an attractive alternative to the car. The vast majority of bus service in Greater Manchester is commercial. As a matter of course the commercial services deal with profitable routes with many passengers and have limited incentive to care for the whole network. As a representative from one of the private bus operators in Manchester stress, “Coordination for networks is not a [company name] priority. If it is a socially necessary gap GMPTE can procure it”. Coordination of time tables is another feature of an integrated bus network. However, to disallow formation of cartels, fair trade legislation prohibits direct coordination of timetables among bus operators.

³ Hence Norheim mentions four overall conditions: Economic framework conditions; urban structure; framework conditions for use of car; and the quality of public transport service (Norheim 2006).

The quality of bus service also depends on reliability and on *quality of buses, bus lanes and shelters*. In Greater Manchester a way to improve these conditions has been through partnerships to instate so-called *Bus Quality Corridors* with bus priority, renewing of shelters and modernisation of buses. Bus priority and newer buses aim to increase reliability and speed. In an evaluation of bus corridors in all metropolitan areas of England it is found that the passenger not has been in focus of the corridors. Selection of corridors has rather been based on commercial considerations for the operators and political considerations for the local authorities. (NERA 2006) This was also indicated by several interviewees in Greater Manchester. A problem with the voluntary bus quality corridors is that the operators can anytime leave the corridors if they are not sufficiently profitable. Another problem is that there is no safeguard against other operators using the corridors. However, some positive results were obtained in the Manchester bus corridors, as we will return to in the next section,

All in all the reforms in the sector have not managed to change the continued decline in bus passengers experienced since before the Transport Act 1985 (Preston & Holvad 2001: 314). Over the last 20 years the number of bus passengers in the metropolitan counties in England has declined by 50 %. In the 10-year period 1994/5 – 2004/5 the reduction has on average been 20 %, and in Greater Manchester 10 %. Hence, definitely, the reforms experienced in England outside London have not been able to *turn* the downward trend in passengers. Rather the reforms have contributed to the decline in passengers through increase in fares and limited integration of the bus network, though the quality of bus services to some extent have increased due to Bus Quality Partnerships.

Can the specific configurations of market, hierarchy and network in the horizontal dimension contribute to explain performance in Greater Manchester as regards modal shift? The *market* is the dominant mode of governance in Manchester. But to achieve a modal shift in favour of bus transport, the market mode of governance does not seem effective. For the operators, modal shift is not an aim, and some interviewees suggest that operators have shown limited innovation, when it comes to modal shift. An interviewee from one of the large operators cannot think of examples where the company has made efforts to attract new passengers in areas with very high car ownership levels. The operators want to attract travellers to the company's services, but attracting patronage from the competitors, or the metro is equal and probably less demanding than attempting to attract car drivers. The provision of an integrated and coherent bus network is not seen as an objective for the operators. Thus, the inherent logic of action of the market seems not to contribute to a modal shift, by way of providing a more integrated system. The remaining element of hierarchy (the fair trade legislation) has served as a strong deterrent to any coordinating behaviour, according to interviewee's from both the private and public side.

Among the strengths of the market is economic efficiency, and measured by this parameter the market seems to work in Greater Manchester. A Bus vehicle kilometre today is cheaper to produce than before deregulation. In all of England the production cost pr. Vehicle kilometre was reduced by 41 % between 1985 and 2003 (Longva et al. 2005: 2-3). The reduced subsidies (Commission for integrated transport 2004: 15) however have not been returned to the operation of buses.

One of the strengths of hierarchy is accountability. Because tasks and authority relations are clear, different parts of a hierarchy can be expected to be accountable to decisions made. Accountability towards the objective of attracting passengers is missing in Greater Manchester, because the

hierarchical mode of governance is relatively absent. The fair trade legislation and The Fair Trade Office are among the representatives of the hierarchical mode, and the Fair Trade Office intervenes in the market to prevent monopolies and enhance competition. The fair trade legislation however also prevents an important aspect of coordination by prohibiting cooperation on timetabling. The Fair Trade Office does not seem to contribute to the objective of attracting passengers.

Through voluntary bus partnership, the *network mode* of governance with some success has been introduced to compensate for market failures. The network cooperation through Bus Quality Corridors is however marked by free rider problems and lack of accountability. Hence, the authorities are not effective in delivering bus priority across local districts, and the operators can anytime leave a quality corridor if it is not profitable. Extending the network mode of governance seems to be decisive if the aim is a modal shift in favour of public transport, since all the conditions impacting on a modal shift have to be taken into consideration, and that involves many stakeholders with complementary strengths.

In some situations the governance modes complement each other e.g. network in the horizontal dimension can be seen as complementing a market mode. But the governance modes do also contradict, and the understanding and logic of action inherent to each mode might erode the understanding and logic of action in another mode (Rhodes 2000). Hence, e.g. the ambition of control and command in the hierarchical mode may erode the trust inherent in the network mode of governance, as illustrated by a representative from an operator, when he asks: “If you go for control. Where is the trust? And where is the partnership?” Also the market mode of governance seems to challenge the network mode in the horizontal dimension when free rider problems are experienced.

5. Vertical organisation

The deregulation reforms reduced the direct government control over the provision of urban public transport services. To pursue sustainable urban transport aims under such circumstances can be seen as a challenge,. Nevertheless both central UK government (DETR 2000) and the authorities in the Greater Manchester area (AGMA & GMPTA, 2000) have pledged to do just that – enhancing and improving public transport.

The overall objectives for shifting travellers towards public transport in the UK were originally defined in the Governments “10 year plan for transport”, with later modifications (DETR 2000). These objectives were then fed into more specified sets of targets and indicators in the central guidelines for LTPs and associated assessment criteria. The system has been revised several times, but public transport promotion aims have remained throughout.

Greater Manchester has produced two LTPs. We will focus on LTP1 (AGMA & GMPTA 2000). The plan instated thirteen general transport objectives, including two of direct relevance for public transport and modal split, namely “To provide a high quality integrated public transport network to increase the attractiveness of travel by non-car modes”, and “To manage the demand for car travel”.

To deliver on these objectives, Greater Manchester' applied for funding to a range of projects, and several were granted. An extensive transport monitoring reporting scheme was set up to follow up on the implementation. The scheme included 17 so-called "headline targets" with associated indicators. The purpose of the system was to be able to document effects of the plan, and not least to satisfy the reporting requirements of central government. According to interviews with Greater Manchester officials, these requirements were taken very seriously since they were used for regular (annual) assessment of performance, and subsequent adjustment to the grants given from government. An interviewee states: "Because the funding comes attached to it you tend to listen to whoever is paying the money. [...] It has been very much focused on delivering national outcomes." For example, if central government would assess the delivery of an LTP as 'Excellent' it could mean up to 25 % of added funding compared to what was requested whereas 'fair' result scoring could lead to deductions.

For the public transport objectives the Delivery Report for LPT 1 states so-called "Fair Progress" (grade 2 out of max 4). In the reports some positive results are noted in terms of "[b]roadly stabilising bus patronage against a background of rising car ownership and use"; "a recorded increase of around 12 %-14 % in bus patronage on some Quality Bus Corridors"; and "[l]imiting traffic growth on main roads to less than 1 % from 2000" (AGMA & GMPTA 2006a: 10; AGMA & GMPTA 2006b: 53). All in all the results suggests some, of limited positive results in terms of the attracting passengers to public transport in Greater Manchester.

An impressive MBOR regime with links to funding has been devised. Generally the regime appears to have a relatively strong focus on improving public transport. Efforts in Greater Manchester seem to be in good general correspondence with the national concerns. However, the specific way the objectives are represented in the monitoring regimes are limited. Hence, the central objectives or follow-up requirements did not specify targets for *shifting car drivers to public transport*, but only for increasing the travel or patronage in each of the public transport systems. Subsequently the performance has been assessed with regard to travel/patronage figures for each mode, and not shifting. Increased patronage does obviously not necessarily imply reduced car driving. Moreover the central goals and targets have changed with downplaying of ambitions in the public transport area (Knowles 2007). It is not possible to say to what extent such limitations in the MBOR regime have meant weaker efforts to actually shift passengers. Probably the conditions established with the horizontal reform (deregulation) have been decisive. What can be said is that the MBOR system has not been used with full force to zoom in on measures to move people out of cars and into buses.

Can the specific configuration of hierarchy and network in the vertical dimension contribute to explain performance in Greater Manchester as regards modal shift? The type of governance regime involved can be seen as an interesting mix of hierarchy and network elements, while the previous arrangements (before Labour's transport reforms) resembles as a traditional *hierarchical* relation. In the new system some of these elements have been retained with others added. The centre still sets the rules and provides the general objectives, and continues to administer significant parts of the (now increased) funding for local capital spending, which seem to maintain a 'centralised' hierarchy. However, the centre is in fact limited in terms of ability to instruct the local level what to actually implement in terms of bus transport provision, should it wish to do so. Significant parts of the road network are for example owned locally, and more importantly the centre suffers from major information deficits as regards urban planning and development, and managing the local public transport networks. To the extent that central government assumes responsibility for a sustainable transport policy it is therefore

dependent on the (albeit limited) powers of the local authorities in those areas. Hence conditions for *elements of network governance* are present. This becomes manifest e.g. in the mutual adjustment of central and local objectives to be pursued in the LTP regime, albeit under significant central guidance.

It appears relevant and reasonable to increase the importance of a network mode of governance, due to interdependency and complementary strengths. While hierarchy can contribute with accountability, the network mode of governance makes it possible to exchange context specific information that is necessary to design and implement a local transport scheme. What we experience is “network in the shadow of hierarchy”, which seems to be an improvement over the former more purely hierarchical system.

Though hierarchy and network complement each other, they can also threaten each other by eroding the logic of action of the other mode. Hence, the network relations based on trust do contradict with a prescriptive and top down approach. One of the interviewees from GMPTE emphasizes exactly that by saying that, “the government first set out guidance that was very prescriptive”, and he underlines that “the whole process [of LTP 1] has been a very top-down approach and it is more about delivering the central government objectives rather than local government objectives”. In LTP 2 however, the reporting requirements were loosened, and the process points towards more network governance.

6. Conclusions

We have suggested two objectives of the paper. The *first objective* is to analyse which conditions the horizontal and vertical reform dimensions create for a modal shift in favour of public bus sector in Greater Manchester.

Several conditions affect the possibilities for attracting travellers, and obtaining a modal shift. As regards the horizontal dimension, the overall conclusion is that although reforms have proven useful for reducing the costs of vehicle kilometres, they are not instrumental when it comes to attracting passengers and obtaining modal shift. Modal shift is not an objective for the operators. Fare levels have increased due to reduction in subsidies and possibly due to local monopolies, and a relatively fragmented bus network is experienced. The quality of bus services however have improved via the introduction of quality bus corridors. In fact, the relatively weak “instrument” of voluntary bus quality partnerships has been one of the main instruments to increase attractiveness in the bus sector, in the absence of regulatory or more extensive tendering powers. Hence, the objective of attracting passengers has been difficult to pursue due to the organisation of the bus sector, which has left the local authorities with very limited powers.

When it comes to the vertical dimension, central government via the system of MBOR has stressed the objective of attracting travellers, and the Greater Manchester authorities have incorporated the objective in the Local Transport Plans. The attention has however not been to move car drivers into the buses, but “only” to increase the attractiveness of public transport. The local objectives in Greater Manchester are in good general correspondence with the central government concerns raised in the 10 year plan. The MBOR instrument seems to work reasonably well in the relation between central and local government, and the system in itself is not to blame for not including an objective on modal shift. The main problem for the MBOR system is the weak linkage between the objective of attractiveness

and the object of the MBOR-system. Operators are the main stakeholders to attract travellers, but they are not accountable to central (or local) government and the MBOR-system. Hence, objectives put forward in the vertical dimension seem almost impossible to implement due to the organisation of the horizontal dimension. Overall the policy becomes almost self-defeating.

The *second objective* is to consider if the specific configuration of governance modes in Greater Manchester public bus transport can help explain the performance as regards modal shift.

First it should be emphasized that significant factors such as the economic framework conditions, and the urban structure, influence travel patterns and modal split (Norheim 2006), without being directly connected to organisation of transport policy and bus services

Nevertheless, the specific configuration of the three governance modes does suggest explanatory aspects. In the horizontal dimension the market is the dominant governance mode. But the objective of the operators is not to obtain a modal shift. The logic of action of the market actors is to increase the company's market shares, but not necessarily by a modal shift. In Greater Manchester, the network mode of governance is the only mode which positively has contributed to strengthen the attractiveness of public bus transport. The network mode of governance is important to engage all horizontal stakeholders. But the current networks are much too weak to resist free rider problems. Greater Manchester lacks implementation agents which are accountable to the objective of achieving modal shift, and that point towards a stronger role for the hierarchical mode of governance. When it comes to the vertical dimension the strengthening of a network mode of governance which is taking place, seem to be a necessary supplement to the hierarchical mode due to the division of responsibility and complementary strengths.

To obtain modal shift in a situation where responsibilities for operating the various parts of an urban transport system is dispersed, extensive cooperation between large numbers of stakeholders in the horizontal as well as vertical dimensions is necessary, and that amounts to extensive use of a network mode of governance. A re-configuration of governance modes where the market and network modes of governance play important parts - however operating in the shadow of – or perhaps the light of - hierarchy might constitute a way forward, if complex objectives like sustainable transport are to be pursued.

Tendered systems like the ones working in London, and in countries like Denmark and Sweden represent a different mix of the governance modes. It is beyond the scope of this paper to discuss if those systems are more successful in providing for shifting of car travellers to public transport or obtaining sustainability, but we would stipulate that the application of a 'governance mode' type of analysis in the two dimensions could help to reveal how the different mix of modes complement or contradict each other in the provision of effective public transport.

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